

ginal, prominent, dark brown : *antennæ* three, frontal, filiform, rather short, equal in size and equally distanced, porrect, faintly annular. *Segments* twenty-five in the specimen examined, distinct, broader than long, the post-occipital and anal considerably less than the others and with proportionably small appendages : *feet* papillary, uniramous, each armed with a dorsal *cirrus* twice as long as the foot, obscurely moniliform, colourless, and with two bundles of bristles, the superior bundles consisting of short stout retractile bristles, jointed near the top, and with a *spine* in their middle ; the inferior bundles of very long setaceous unjointed *hairs*, which the worm has no power of withdrawing. The first pair of feet is destitute of this inferior bundle. The anal extremity was wanting in the only specimen I have yet met with, but from the reparation which had begun I believe it to be terminated by two styles similar to the dorsal cirrus.

[To be continued.]

XXV.—*Descriptions of British Chalcidites.* By FRANCIS WALKER, F.L.S.

[Concluded from p. 32.]

GENUS PTEROMALUS, *Swederus.*

*Fem. P. disco proximus* : corpus breve, convexum, parum nitens, scitissime squameum, parce hirtum : caput transversum, breve, thorace latius ; vertex latus ; frons abrupte declivis : oculi mediocres, non extantes : antennæ subclavatæ, thorace longiores ; articulus 1<sup>us</sup> gracilis, sublinearis ; 2<sup>us</sup> longus, basi ad apicem latescens ; 3<sup>us</sup> et 4<sup>us</sup> minimi ; 5<sup>us</sup> et sequentes breves, approximati, usque ad 10<sup>um</sup> curtantes ; clava longiovata, articulo 10<sup>o</sup> duplo longior : thorax ovatus : prothorax transversus, brevissimus : mesothoracis scutum longitudine paullo latius ; parapsidum suturæ vix conspicuæ ; scutellum conicum : metathorax transversus, mediocris, declivis, postice angustior : petiolus brevissimus : abdomen nitens, læve, latitudine paullo longius, supra planum, subtus carinatum, thorace multo brevius paullo latius ; pedes simplices, subæquales : alæ angustæ ; nervus humeralis ulnari fere duplo longior, radialis ulnari paullo brevior cubitali longior ; stigma minutum.

Sp. 1. Pter. Promulus, Fem. *Viridi-cyaneus*, abdomen purpureo-cupreum, antennæ fuscæ, pedes flavo-fulvi, femora viridi-picea, alæ fuscæ.

*Viridi-cyaneus* : oculi et ocelli rufi : antennæ fuscæ ; articulus 1<sup>us</sup> et 2<sup>us</sup>

fulvi : abdomen viride ; discus purpureo-cupreus : pedes fulvi ; coxæ cyaneo-virides ; femora viridi-picea ; genua flava ; meso- et metatarsi flavi, apice fusci : alæ fuscæ ; squamulæ piceæ ; nervi proalis fusci, metalis flavi. (Corp. long. lin. 1 ; alar. lin.  $1\frac{2}{3}$ .)

Found near Edinburgh, by Dr. Greville.

*Mas. P. Favorino proximus* : corpus longum, sublineare, convexum, parum nitens, scitissime squameum, parce hirtum : caput transversum, breve, thorace paullo latius ; vertex latus ; frons abrupte declivis, vix impressa : oculi mediocres, non extantes : antennæ graciles, filiformes, thorace multo longiores ; articulus 1<sup>us</sup> gracilis, sublinearis ; 2<sup>us</sup> subrotundus ; 3<sup>us</sup> et 4<sup>us</sup> minimi ; 5<sup>us</sup> et sequentes longi, lineares, usque ad 10<sup>um</sup> curtantes ; clava longifusiformis, articulo 10<sup>o</sup> plus duplo longior : thorax longiovatus : prothorax transversus, brevissimus : mesothoracis scutum longitudine vix latius ; parapsidum suturæ vix conspicuæ ; scutellum prominens, fere conicum : metathorax transversus, sat magnus, declivis, postice angustior : petiolus brevissimus : abdomen depressum, læve, nitens, basi ad apicem latescens, thorace paullo longius et angustius : pedes graciles, simplices, subæquales : alæ mediocres ; nervus humeralis ulnari fere duplo longior, radialis ulnari multo longior, cubitalis radiali multo brevior ; stigma minutum.

Sp. 2. Pter. Varro, *Mas. Cyaneo-viridis, abdomen cupreo-purpureum fulvo-maculatum, antennæ nigræ, pedes lutei fusco-cincti, alæ limpidaæ.*

*Cyaneo-viridis* : oculi et ocelli rufi : antennæ nigræ ; articuli 1<sup>us</sup> et 2<sup>us</sup> virides : abdomen cupreo-purpureum, ante medium fulvo obsolete maculatum : pedes lutei ; coxæ virides ; femora fusca, apice flava ; tarsi apice fusci ; mesotibiæ fusco cinctæ ; metatibiæ fuscæ ; protarsi fulvi : alæ limpidaæ ; squamulæ piceæ ; nervi proalis fusci, metalis flavi. (Corp. long. lin.  $1\frac{1}{2}$  ; alar. lin.  $2\frac{1}{3}$ .)

Found near Edinburgh, by Dr. Greville.

#### Genus ENCYRTUS, Dalman.

*Mas. E. clavicorni proximus* : corpus breve, crassum, latum, convexum, scitissime squameum, rude punctatum, parum nitens, parce pubescens : caput transversum, breve, thorace non latius ; vertex latus ; frons abrupte declivis, non impressa : oculi mediocres, non extantes : antennæ clavataæ, crassæ, ad os insertæ, thorace longiores ; articulus 1<sup>us</sup> basi ad apicem latescens ; 2<sup>us</sup> longicyathiformis ; 3<sup>us</sup> et sequentes breves, usque ad 8<sup>um</sup> latescens ; clava longiconica, articulo 8<sup>o</sup> multo latior et triplo longior : thorax sublinearis, latitudine duplo longior : prothorax transversus, brevissimus : mesothoracis scutum longitudine multo latius ; parapsides scuto in unum confusæ ; paraptera fere inter scutum et scutellum convenientia ; scutellum magnum, longiobconicum : metathorax transversus, parvus : abdomen obconicum, planum, nitens, læve, fere glabrum, quasi sessile, thorace multo brevius vix angustius ; segmentum 1<sup>um</sup> maximum, 2<sup>um</sup> et sequentia brevissima : pedes validi ; mesopedum tibiæ longæ apice crassæ et spinigeræ, tarsi lati : alæ mediocres ; nervus humeralis costæ dimidio brevior, cubitalis sat longus, ulnaris et radialis nulli.

Sp. 1. Enc. Nicippe, Mas. *Viridi-æneus cyaneo-varius, abdomen cupreum, antennæ nigræ, pedes fulvi, alæ limpida.*

Viridi-æneus: oculi et ocelli rufi: antennæ nigræ; articulus 1<sup>us</sup> fulvus, 2<sup>us</sup> fuscus: mesothoracis scutum cyaneo-viride: abdomen cupreum: pedes fulvi; coxæ æneæ; ungues et pulvilli fuscii: alæ limpida; squamulæ piceæ; nervi fulvi. (Corp. long. lin. 1; alar. lin. 1 $\frac{3}{4}$ .)

September, Northumberland, found by Dr. Greville.

#### Genus THYSANUS, Walker.

“Corpus elongatum. Antennæ quasi 3-articulatæ articulo 3 lineari-elongato. Alæ longe ciliatæ. Nervus subcostalis abrupte terminatus apice non deflexus. Tarsi medii longissimi.

“Corpus lineare subdepressum. Caput oblatum. Antennæ prope os insertæ (6 articulatae?) (9 articulatae?) articulus 1<sup>us</sup> linearis radícula gracili; 2<sup>us</sup> brevior, obconicus, sequentes tres brevissime annuliformes vix conspicui; 3<sup>us</sup> (ex analogia trium locum implens) præcedentibus conjunctim longior, mari duplo longior, linearis compressus subnudus. Collare antrorsum attenuatum. Sutura parapsidum inconspicua. Scutellum obtusum. Abdomen sessile oblongum dorso deplanatum (plica elevata acuminata per basin protracta); segmentis subæqualibus; fem. longius, apice acuminatum; subtus carinatum, rima infera ad  $\frac{1}{3}$  longitudinis protracta. Terebra recondita. Alæ plumato-ciliatæ, ulna crassiuscula costæ medium superante et abrupta. Pedes tarsis longis tenuibus, mediis longissimis.

“Sp. 1. Th. ater.

“Niger nitidus verticis margine, fronteq. media rufis; verticis macula albicante prope utrumque oculus. Antennæ ochraceæ articulus 1<sup>o</sup> 2<sup>o</sup> obscurioribus. Pedes ochreo-fuscii, geniculis tarsisque pallidioribus. Alæ hyalinæ nervo fusco, fascia media effusa infumata. (Corp. long. lin.  $\frac{1}{2}$ ; alar. lin.  $\frac{3}{4}$ .)”—Haliday.

#### Genus EULOPHUS, Geoffroy.

“*Eulophus alce*, Mas. Obscure viridi-æneus, scutello cupreo, abdomine nigro-viridi basi ænescente. Antennæ fuscæ, scapo nigro-viridi, articulis 3<sup>o</sup> 4<sup>o</sup> 5<sup>o</sup> basi ramum validum pectinatum emittentibus: ramus interior illis articulis conjunctim æqualis: articuli sequentes coarctati clavam lanceolatam, articulos 4<sup>um</sup> et 5<sup>um</sup> conjunctim longitudine æquiparantem, sed multo crassior, fingentes; 6<sup>us</sup> hujus clavæ dimidium occupat, 8<sup>us</sup> apice spinula parva. Metathorax longitudine et latitudine subæqualibus, apice parum attenuatus; reticulato-rugulosus, carinula media levi, lateralibus nullis. Petiolus brevis validus, obscure æneus, sublævis,  $\frac{1}{2}$  coxarum posticarum æquiparans. Pedes validi: antici flavi tarsis subfuscis: posteriores flavi, tibiarum et tarsorum apice late, femoribus mediis medio, posticis basi demta fuscis. Coxæ nigro-virides. Tarsi breves. Tibiæ posteriores subsinuatae. Alæ obscure hyalinæ, nervis dilute fuscis; radio pallidior, breviusculo, subarcuato, angulum acutissimum fingente. Long. vix 1 lin.

“Clifden, July, 1839.”—Haliday.

## Genus ENTEDON, Dalman.

Mas. *E. Cydoni* proximus: corpus convexum, nitens, scitissime squameum, parce hirtum: caput transversum, brevissimum, vix thoracis latitudine; vertex latus; frons impressa, abrupte declivis: oculi mediocres, non extantes: ocellus medius perparum antepositus: antennæ filiformes, graciles, thorace longiores; articulus 1<sup>us</sup> longifusiformis; 2<sup>us</sup> cyathiformis; 3<sup>us</sup>, 4<sup>us</sup>, et 5<sup>us</sup> lineares, discreti; clava gracilis, attenuata, acuminata, articulo 5<sup>o</sup> longior et angustior: thorax ovatus: prothorax brevissimus, supra vix conspicuus, antice angustus: mesothoracis scutum longitudine multo latius; parapsidum suturæ bene determinatæ; scutellum subovatum: metathorax mediocris, transversus: petiolus brevissimus: abdomen sublineare, planum, læve, thorace multo brevius et angustius; segmentum 1<sup>um</sup> maximum; 2<sup>um</sup> et sequentia brevissima: pedes graciles, simplices, subæquales: alæ latæ; nervus ulnaris humerali multo longior, radialis brevis, cubitalis adhuc brevior.

Sp. 1. Ent. Hersilia, Mas. *Viridis cyaneo-cupreo et purpureo varius, antennæ nigrae, pedes fulvo-flavi, femora viridia, alæ limpidae.*

Viridis: caput aureo-viride: oculi et ocelli rufi: antennæ nigrae; articuli 1<sup>us</sup> et 2<sup>us</sup> virides: abdomen cupreum, basi aureo-viride: pedes flavi; coxæ virides; trochanteres fuscii; femora viridia, apice flava; tarsi fulvi; protarsi fuscii; alæ limpidae; squamulæ piceæ; nervi proalis picei, metalis fuscii. (Corp. long. lin.  $\frac{3}{4}$ — $\frac{2}{3}$ ; alar. lin.  $1\frac{1}{3}$ — $1\frac{1}{2}$ .)

Var.  $\beta$ .—Thorax cyaneo-viridis: mesothoracis scutellum cupreum: tibiæ fulvæ; tarsi obscuriores.

Var.  $\gamma$ .—Mesothoracis scutellum purpureo-cupreum: abdomen basi cyaneum: tibiæ fulvæ.

Found by Dr. Greville near Edinburgh, and during September in Northumberland.

“*Entedon rutilans*, Mas. Rubro-aureus. Abdomen convexius, dimidio anteriore albida, basi summa fusco-æneo. Antennæ 8-art. moniliformes, articulis 1<sup>o</sup>, 2<sup>o</sup> fuscis, reliquis fusco ferrugineis pilosis; 2<sup>us</sup> major 3<sup>o</sup>. Stemmaticum valde elevatum. Genæ pone oculos villosæ latæ. Metathorax apice, pone carinam transversam bis-arcuatam producto-attenuatus, petioli insertionem amplectens. Pedes flavidi, coxis cyaneo-viridibus, unguibus fuscis.

“*Entedon gemmeus*, Mas. Purpurascenti-ruber. Abdominis segmentum 2<sup>um</sup> macula media albida. Antennæ 7-articulatæ fusca, 2<sup>o</sup> et 3<sup>o</sup> subæqualibus, anello interjecto: 6<sup>o</sup> et 7<sup>o</sup> subconnatis. Genæ angustiores. Metathorax apice, sub carina transversa gibbula, breviter deflexus in petioli insertionem. Pedes albidii, coxis fusco-æneis, tarsis posterioribus apice fuscis.

“*Variat*, femoribus posticis basi fusco-lineatis.”—*Haliday*.

## Genus CIRROSPILUS, Westwood.

Fem. *C. Verieni* proximus: corpus sublineare, convexum, nitens, læve, fere glabrum: caput transversum, brevissimum, thorace angustius; vertex latus; frons impressa, abrupte declivis: oculi mediocres, extantes: antennæ subclavatæ, graciles, medio frontis insertæ; articulus 1<sup>us</sup> gracilis, subline-

aris; 2<sup>us</sup> basi ad apicem latescens; 3<sup>us</sup> et sequentes lineares; 4<sup>us</sup> 3<sup>o</sup> brevior, 5<sup>o</sup> longior; clava fusiformis, articulo 5<sup>o</sup> paullo latior et duplo longior: thorax ovatus: prothorax transversus, brevissimus: mesothoracis scutum unisulcatum, fere planum, longitudine paullo latius; parapsidum suturæ remotæ, optime determinatæ; scutellum subrotundum, bisulcatum: metathorax transversus, brevis: petiolus brevissimus: abdomen ovatum, supra planum, subtus carinatum, apice acuminatum, thorace paullo longius et latius: pedes graciles, simplices, subæquales: alæ latæ; nervus ulnaris humerali duplo longior, radialis nullus, cubitalis sat longus; stigma minutum.

Sp. 1. Cirr. Teridæ, Fem. *Nigro-cupreus, antennæ piceæ, pedes fusco-fulvi, femora nigro-cuprea, alæ limpidae.*

*Nigro-cupreus*: oculi et ocelli rufi: antennæ piceæ; articuli 1<sup>us</sup> et 2<sup>us</sup> nigri; pedes nigro-cuprei; trochanteres picei; genua flava; metatibiæ apice fulvæ; mesotibiæ fulvæ, fusco cinctæ; propedum tibiæ fulvæ, tarsi fusci; meso- et metatarsi fusci, basi fulvi: alæ limpidae; squamulæ piceæ; nervi proalis fulvi, metalis flavi. (Corp. long. lin. 1; alar. lin. 2 $\frac{1}{3}$ .)

Found by Dr. Greville, near Edinburgh.

*Fem. C. Sotadi* affinis? corpus angustum, convexum, obscurum, scitissime squameum parce hirtum: caput transversum, breve, thorace paullo latius; vertex latus; frons abrupte declivis: antennæ graciles, extrorsum crassiores, thorace paullo longiores; articulus 1<sup>us</sup> sublinearis; 2<sup>us</sup> longicyathiformis; 3<sup>us</sup>, 4<sup>us</sup>, et 5<sup>us</sup> lineares, subæquales; clava longifusiformis, acuminata, articulo 5<sup>o</sup> plus duplo longior: thorax ovatus: prothorax transversus, brevis: mesothoracis scutum longitudine paullo latius; parapsidum suturæ optime determinatæ; scutellum subrotundum: metathorax transversus, mediocris: petiolus brevissimus: abdomen fusiforme, læve, nitens, supra depressum, subtus carinatum, apice attenuatum et acuminatum, thorace angustius et multo longius; latera subcompressa: pedes simplices, subæquales: alæ mediocres; nervus ulnaris humerali multo longior, radialis nullus, cubitalis brevis.

Sp. 2. Cirr. Brunchus, Fem. *Ater, abdomen nigro-cupreum, antennæ piceæ, pedes flavi, femora nigra, alæ limpidae.*

*Ater*: oculi et ocelli rufi: antennæ piceæ, basi nigræ: abdomen nigro-cupreum: pedes flavi; coxæ nigræ; trochanteres picei; femora nigra; tarsi apice fusci: alæ limpidae; squamulæ piceæ; nervi proalis fusci, metalis flavi. (Corp. long. lin.  $\frac{3}{4}$ ; alar. lin. 1 $\frac{1}{3}$ .)

Found by Dr. Greville, near Edinburgh.

XXVI.—*Hints on the Anatomico-Physiological Differences in the Organization of Stems.* By Dr. M. J. SCHLEIDEN.\*

I HAVE been constantly surprised in reading the numerous controversies on the differences between monocotyledonous and dicotyledonous stems, to find that, in general, they con-

\* Translated from Wiegmann's Archiv, part 3, 1839.